

REMARKS

Prior to the Office Action mailed 25 September 2002, claims 1-16 were pending in the Application. Applicants request herein that claims 1-3, 5-7, 9-11, and 13-16 be amended with no claims added or cancelled. Therefore, upon entry of this Amendment, claims 1-16 will remain pending in the Application. Entry of this Amendment and Allowance of the then-pending claims is respectfully requested.

In the above-mentioned Office Action, all of the pending claims of the application were rejected under 35 U.S.C. 103(a). In particular, independent claims 1 and 9 were rejected under as being unpatentable over *Shintani, et al.* (U.S. Patent No. 5,298,977) and Applicants' Admission of well-known prior art.

Applicants respectfully traverse. The present invention assesses structures on the surface of an object to (separately) obtain both a 2-dimensional (2D) and a 3-dimensional (3D) representation of the surface in a manner that is as rapid and accurate is possible. These representations are created using a first illumination source, which illuminates the entire surface of the object (or alternately a significant portion thereof, that is, not simply at a single point), and a first coherent illumination source (*e.g.*, a laser), at a different frequency, which is used to create a path (or multiple paths) along the surface. Capturing and correlating the images produced by the two sources may be used to more rapidly evaluate surface structures than was possible in prior art systems such as *Shintani, et al.* *Shintani, et al.*, in contrast, uses a three-point convergence scheme that requires three lasers operating at different frequencies and covers the

surface much more slowly. While *Shintani, et al.* discloses its invention in four “aspects”, none of these aspects are close to teaching or suggesting the novel arrangement of the present invention.

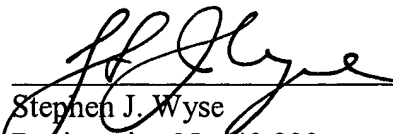
Additional amendments have been made to clarify the claims and to eliminate necessary limitations. Note specifically, that to avoid confusion of the word “scan” has been deleted from references to a “color scan camera”. The “scanning” that is significant to the claimed invention is the scanning of the camera and the coherent light source together over the surface of the object (*See* p. 81, lines 156-17) (rather than the operation of the multi-channel camera itself).

In light of the foregoing, independent claims 1 and 9, and the claims dependent thereon, are believed to be in condition for allowance. Accordingly, reexamination and reconsideration for allowance of these claims is respectfully requested.

Respectfully submitted,

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